

# Lake Michigan Coastal Grants Program

Project Updates  
2003 - 2004



# Projects to Date

- 2003
  - 16 projects totaling \$933,146
- 2004
  - 12 projects totaling \$675,845
- 2005
  - 6 projects totaling \$330,213

# Land Acquisition

2003

Deep River Headwaters

Lake County Parks and Recreation Dept.

\$65,800 / \$65,847

Two 20-acre parcels bordering an existing 257-acre park located at the headwaters of Deep River

Source of match: Non Reverting Land and Capital Improvement Fund

Provides buffer for existing wetlands and for future planned restored wetlands



# Deep River Headwaters



Beaver Dam Ditch wetlands that will be protected



Properties located along Hwy 231 in Crown Point

# Land Acquisition

2003

Salt Creek Land Acquisition

Portage Parks and Recreation Dept.

\$100,000 / \$100,000

130-acre parcel along Salt Creek

Source of match: Indiana Heritage Trust funds

Provide natural buffer along Salt Creek, protect wetlands and provide passive recreation opportunities



# Salt Creek



Wetlands  
on property



Portage Parks Dept. Superintendent  
Carl Fisher discusses the many great  
features of the site



Salt Creek as it flows through the middle  
of the property

# Restoration and Enhancement

2003

Clark and Pine Dune and Swale Restoration

IDNR – Division of Nature Preserves

\$25,000 / \$25,000

Restore globally rare dune and swale natural community

Removal of invasive woody species by mechanical and hand clearing methods, and follow up with a herbicide treatment

Goal of 90% invasives reduction on 20 acres

Source of match: DNP Staff in-kind; TNC cash and in-kind;  
DNP capital, repair & rehab account



# Clark and Pine Dune and Swale Restoration



Removing invasive woody plant species  
can also help restore wetland areas  
on site



Visiting the site in Spring 2004





# Public Access

2004

Hansen Park and 8<sup>th</sup> & Dickson St.

City of Michigan City

\$24,000 / \$16,000

\$100,000 / \$100,000

Hansen Park

8<sup>th</sup> & Dickson

Source of match: Trail Creek NRD and  
Blue Chip Boyd Redevelopment Fund

Source of match: Blue Chip Boyd  
Redevelopment Fund

Design plans for improved public access

Design plans and fishing access to Trail  
Creek

Incorporating both park areas into Michigan City Bikeways system (LWCF)

**LEGEND**

PARK / OPEN SPACE  
 RESIDENTIAL  
 INDUSTRIAL / DEVELOPMENT  
 COMMERCIAL / DEVELOPMENT  
 MEDICAL  
 AGRICULTURE  
 UTILITY CORRIDOR  
 ACTIVE TRAIL CORRIDOR  
 ABANDONED RAIL CORRIDOR  
 EXISTING BICYCLE TRAIL  
 EXISTING BICYCLE ROUTE  
 WATER FEATURES  
 STEEP SLOPES

**PEANUT TRAIL**  
 (HAZARD PLEAS)  
 (Date 00)

**TRAIL SEGMENTS**

SHAPIRO TRAIL - PHASE 1  
 SHAPIRO TRAIL - PHASE 2  
 SHAPIRO TRAIL - PHASE 3  
 SHAPIRO TRAIL - PHASE 4  
 SHAPIRO TRAIL - PHASE 5  
 SHAPIRO TRAIL - PHASE 6  
 SHAPIRO TRAIL - PHASE 7  
 SHAPIRO TRAIL - PHASE 8  
 SHAPIRO TRAIL - PHASE 9  
 SHAPIRO TRAIL - PHASE 10  
 SHAPIRO TRAIL - PHASE 11  
 SHAPIRO TRAIL - PHASE 12  
 SHAPIRO TRAIL - PHASE 13  
 SHAPIRO TRAIL - PHASE 14  
 SHAPIRO TRAIL - PHASE 15  
 SHAPIRO TRAIL - PHASE 16  
 SHAPIRO TRAIL - PHASE 17  
 SHAPIRO TRAIL - PHASE 18  
 SHAPIRO TRAIL - PHASE 19  
 SHAPIRO TRAIL - PHASE 20  
 SHAPIRO TRAIL - PHASE 21  
 SHAPIRO TRAIL - PHASE 22  
 SHAPIRO TRAIL - PHASE 23  
 SHAPIRO TRAIL - PHASE 24  
 SHAPIRO TRAIL - PHASE 25  
 SHAPIRO TRAIL - PHASE 26  
 SHAPIRO TRAIL - PHASE 27  
 SHAPIRO TRAIL - PHASE 28  
 SHAPIRO TRAIL - PHASE 29  
 SHAPIRO TRAIL - PHASE 30  
 SHAPIRO TRAIL - PHASE 31  
 SHAPIRO TRAIL - PHASE 32  
 SHAPIRO TRAIL - PHASE 33  
 SHAPIRO TRAIL - PHASE 34  
 SHAPIRO TRAIL - PHASE 35  
 SHAPIRO TRAIL - PHASE 36  
 SHAPIRO TRAIL - PHASE 37  
 SHAPIRO TRAIL - PHASE 38  
 SHAPIRO TRAIL - PHASE 39  
 SHAPIRO TRAIL - PHASE 40  
 SHAPIRO TRAIL - PHASE 41  
 SHAPIRO TRAIL - PHASE 42  
 SHAPIRO TRAIL - PHASE 43  
 SHAPIRO TRAIL - PHASE 44  
 SHAPIRO TRAIL - PHASE 45  
 SHAPIRO TRAIL - PHASE 46  
 SHAPIRO TRAIL - PHASE 47  
 SHAPIRO TRAIL - PHASE 48  
 SHAPIRO TRAIL - PHASE 49  
 SHAPIRO TRAIL - PHASE 50  
 SHAPIRO TRAIL - PHASE 51  
 SHAPIRO TRAIL - PHASE 52  
 SHAPIRO TRAIL - PHASE 53  
 SHAPIRO TRAIL - PHASE 54  
 SHAPIRO TRAIL - PHASE 55  
 SHAPIRO TRAIL - PHASE 56  
 SHAPIRO TRAIL - PHASE 57  
 SHAPIRO TRAIL - PHASE 58  
 SHAPIRO TRAIL - PHASE 59  
 SHAPIRO TRAIL - PHASE 60  
 SHAPIRO TRAIL - PHASE 61  
 SHAPIRO TRAIL - PHASE 62  
 SHAPIRO TRAIL - PHASE 63  
 SHAPIRO TRAIL - PHASE 64  
 SHAPIRO TRAIL - PHASE 65  
 SHAPIRO TRAIL - PHASE 66  
 SHAPIRO TRAIL - PHASE 67  
 SHAPIRO TRAIL - PHASE 68  
 SHAPIRO TRAIL - PHASE 69  
 SHAPIRO TRAIL - PHASE 70  
 SHAPIRO TRAIL - PHASE 71  
 SHAPIRO TRAIL - PHASE 72  
 SHAPIRO TRAIL - PHASE 73  
 SHAPIRO TRAIL - PHASE 74  
 SHAPIRO TRAIL - PHASE 75  
 SHAPIRO TRAIL - PHASE 76  
 SHAPIRO TRAIL - PHASE 77  
 SHAPIRO TRAIL - PHASE 78  
 SHAPIRO TRAIL - PHASE 79  
 SHAPIRO TRAIL - PHASE 80  
 SHAPIRO TRAIL - PHASE 81  
 SHAPIRO TRAIL - PHASE 82  
 SHAPIRO TRAIL - PHASE 83  
 SHAPIRO TRAIL - PHASE 84  
 SHAPIRO TRAIL - PHASE 85  
 SHAPIRO TRAIL - PHASE 86  
 SHAPIRO TRAIL - PHASE 87  
 SHAPIRO TRAIL - PHASE 88  
 SHAPIRO TRAIL - PHASE 89  
 SHAPIRO TRAIL - PHASE 90  
 SHAPIRO TRAIL - PHASE 91  
 SHAPIRO TRAIL - PHASE 92  
 SHAPIRO TRAIL - PHASE 93  
 SHAPIRO TRAIL - PHASE 94  
 SHAPIRO TRAIL - PHASE 95  
 SHAPIRO TRAIL - PHASE 96  
 SHAPIRO TRAIL - PHASE 97  
 SHAPIRO TRAIL - PHASE 98  
 SHAPIRO TRAIL - PHASE 99  
 SHAPIRO TRAIL - PHASE 100

**DATE:** September 20, 2008

**BES**  
 BUREAU OF ENGINEERING & SURVEYING  
 2000 E. 10TH STREET, SUITE 100  
 MIDLAND, TEXAS 79701

# Education & Outreach

2003

CILC Vista: Creating a Community  
Partnership for Coastal Water Preservation

Center for Interactive Learning and  
Collaboration

\$50,000 / \$33,000

Interactive program between 5 regional schools: Bailly Middle School in Gary, Washington Township Middle/High School and Morgan Township Middle/High School in Porter County, and Krueger Middle School and Elston Middle School of Michigan City

Source of match: In-kind staff, videoconferencing connections and evaluation supplies



# CILC



**Krueger Middle School –  
Students focus on protection,  
preservation and promotion**



**Ms. Leslie Samuelson  
assists her  
student with the  
research of  
beach clean ups**



**Bailly Middle School –  
Students with their project display**

# CILC

**Morgan Township Middle School -  
Amber Shepherd's 8<sup>th</sup> Grade Science Classes  
are studying Purple Loosestrife and  
Galerucella beetles**



**National Park Service Ranger  
Kip Walton assists student with  
project set-up**



# Education & Outreach

2003

Indiana Coastal Restoration Action Team

Save the Dunes Conservation Fund

\$69,950 / \$42,900

Identified partners, established an advisory group, identified and prioritized restoration and training needs

Held field training days to start addressing needs

Source of match: Donation of a conservation easement to DNR Division of Nature Preserves on 17.4 acres of forested wetland and riparian habitat owned by SDCF

Created outreach materials



# ICRAT

## Field Demonstration Days



Red Mill County Park -  
Participants learn how to combat  
Autumn Olive and Multiflora Rose

Steve Barker instructs on the  
proper removal of Black Locust  
in Moraine Nature Preserve



Carol Cook demonstrates native  
seed preparation to Krueger Middle  
School students in Michigan City

# Education & Outreach

2004

Coffee Creek Watershed Plan Data  
Collection and Public Outreach

Coffee Creek Watershed Conservancy

\$68,837 / \$46,264

Source of match: In-kind staff and supply purchases

Collected land owner information for properties adjacent to Coffee Creek and its tributaries.

Conducted riparian vegetation survey on Pope O'Connor ditch.

Acquired and utilizing GIS spatial technology for decision making.

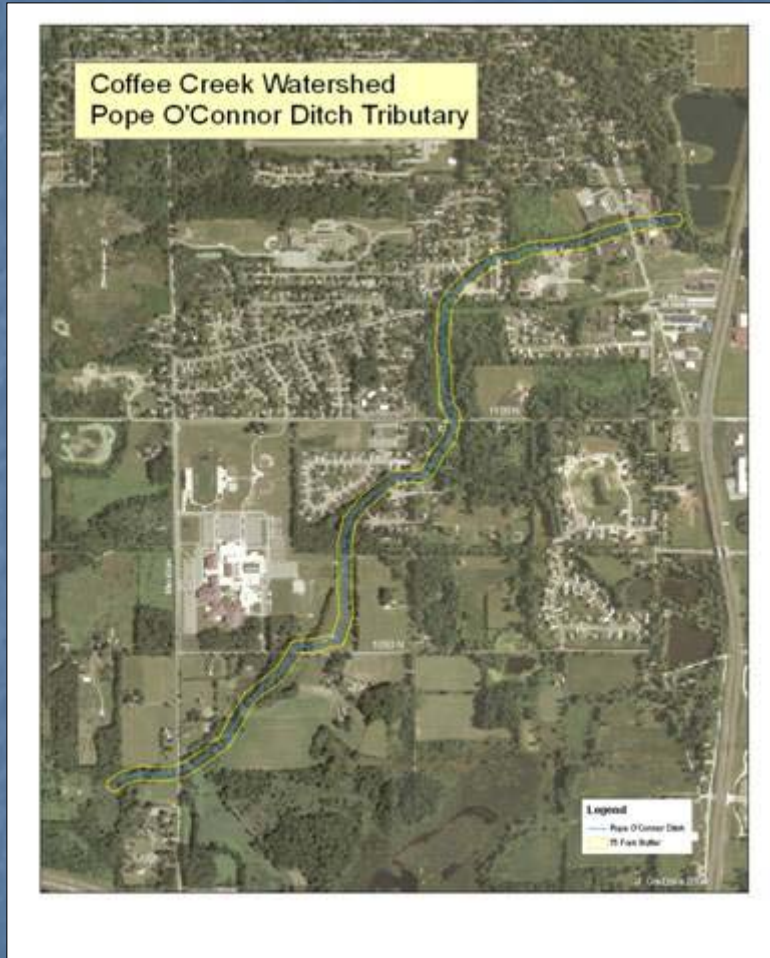
Awarded newest Hoosier Riverwatch monitoring equipment.

Met with DNR District Forester re: forest management.

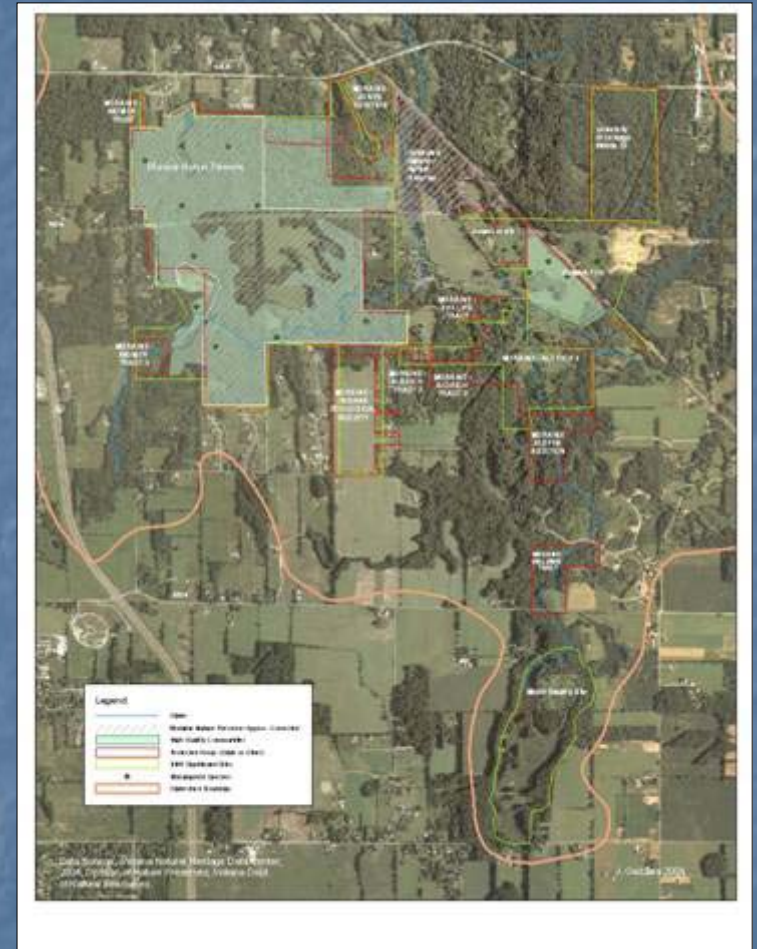
Presented the Shooter Ditch wetlands project at the Lakewide Summit held at Wingspread, Racine, Wisconsin



# Coffee Creek



High quality communities and protected areas in Coffee Creek headwaters.

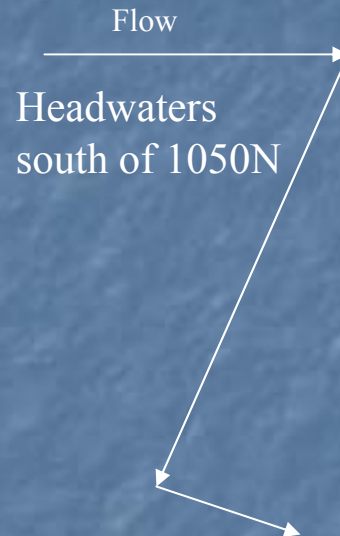


2003 color aerial photography with delineated riparian buffer on Pope O'Connor ditch.



# Coffee Creek

## Pope O'Connor Ditch Riparian Vegetation Survey



**Owner interested in native plantings**



**Owner interested in restoration  
of this 10 Acres**



**Buffer along commercial area at Calumet Road**

# Research

2004

Demonstration of oak savanna restoration

Purdue University Calumet

Prof. Young Choi

\$38,832 / \$25,888

2-acre study area in an abandoned sand mine

Source of match: In-kind services

Installation of interpretive signage, creation of educational brochures, tours and workshops



# Demonstration of oak savanna restoration



Mycorrhizae inoculation

Oak seedling



Project area with seedlings